

2013 State Wildlife Grants

Funded Projects

1) Colorado Department of Natural Resources, Division of Parks and Wildlife

Title: Colorado Wildlife Action Plan Enhancement: Climate Change Vulnerability Assessment

State(s): Colorado

Goals and Objectives: Colorado Parks and Wildlife will utilize State Wildlife Grant funds to collect and analyze a variety of current datasets including climate projections and species distribution models to produce a robust vulnerability assessment for the State's species of greatest conservation need (SGCN). In obtaining this data, staff will utilize resources of a wide variety of state, federal, and private conservation partners, including the Southern Rockies and Great Plains Landscape Conservation Cooperatives and the North Central Climate Science Center. The state agency will produce vulnerability assessments for at least 10 major habitats and their associated species, based on the best-available science. The assessments will inform the agency's current review of their State Wildlife Action Plan.

Federal Funds Requested: \$75,000; **Non-Fed Match:** \$25,000

2) Colorado Department of Natural Resources, Division of Parks and Wildlife

Title: Conservation of Native Reptiles in a Changing Environment

State(s): Colorado, North Dakota

Project Goals: Reptiles are expected to be particularly susceptible to impacts related to climate change. This project will help resource managers anticipate and address such impacts by designing and testing a landscape-scale reptile monitoring program that assesses essential habitats and evaluates climate-related risk factors. Results will be used to establish a volunteer-based reptile monitoring program. The success of this collaborative effort depends on contributions from Colorado Parks and Wildlife, Colorado State University, Texas Parks and Wildlife, and the Colorado State Land Board. Additional support will be provided by the Partners for Reptile and Amphibian Conservation (PARC), and the Great Plains Landscape Conservation Cooperative, among others.

Federal Funds Requested: \$101,566; **Non-Fed Match:** \$70,580

3) Connecticut Department of Energy and Environmental Protection, Bureau of Natural Resources, Division of Wildlife

Title: Rangewide New England Cottontail Initiative

State(s): Connecticut, New Hampshire, Massachusetts, Maine, New York, Rhode Island

Goals and Objectives: This project is the third phase of a regional, landscape-scale initiative begun in 2008 to reverse the decline of the New England cottontail rabbit (*Sylvilagus transitionalis*). This species is a high-priority candidate for federal protection under the Endangered Species Act, a potentially costly outcome that project partners seek to avoid through targeted conservation actions on federal, state and private lands. The project approach uses sophisticated population modeling to identify critical parcels to target for conservation. The partners will create 25 new habitat patches across the species' range, and monitor and supplement New England cottontail populations within an additional 50 habitat patches. Sites in New Hampshire will receive captive-bred animals provided through a partnership with the Roger Williams Park Zoo in Providence, Rhode Island.

Federal Funds requested: \$500,000; **Non-Federal Match:** \$269,535

4) Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife

Title: Creating Capacity to Restore a Self-Sustaining Wild Population of 'Alala (*Corvus hawaiiensis*) to Hawai'i Island

State(s): Hawai'i

Goals and Objectives: A broad coalition of private and federal partners working under the leadership of Hawai'i State Department of Land and Natural Resources will collaborate to protect and restore the Hawaiian Crow, or 'Alala, which has been federally listed as an endangered species since 1967. The partners will establish field aviaries at proposed 'Alala release sites and keep the sites free of ungulates, predators, and habitat-altering weeds. The long-term goal of the effort is to establish a viable wild population of the species through the release of captive-bred birds. A key partner in this project is the San Diego Zoo Institute for Conservation Research.

Federal Funds Requested: \$248,524; **Non-Fed Match:** \$150,000

5) Hawai'i Department of Land and Natural Resources, Division of Forestry and Wildlife

Title: Initiating Landscape-Scale Conservation Management of Ka'u Forest Reserve

State(s): Hawai'i

Goals and Objectives: Hawai'i State Department of Land and Natural Resources will implement critical conservation actions within a 2,000-acre management unit of the Ka'u Forest Reserve. The work will address key threats to 18 SGCN, including 12 federally-listed endangered species such as the 'Io or Hawaiian Hawk (*Buteo solitarius*). This broad partnership effort includes many private, state, and federal partners working

together to protect imperiled species within a Priority Ecosystem Conservation Area—one of the most diverse and intact forests on the Big Island of Hawai'i. Conservation actions include fencing and ungulate control, invasive plant control, and habitat restoration.

Federal Funds requested: \$250,000; **Non-Federal match:** \$125,000

6) Hawai'i Department of Land and Natural Resources, Division of Forestry and Wildlife

Title: Management Actions to Prevent the Extinction of Rare Hawaiian Land Snails

State(s): Hawai'i

Goals and Objectives: The Hawai'i Division of Forestry and Wildlife will partner with the U.S. Fish and Wildlife Service, a U.S. Army Garrison, and the University of Hawai'i at Manoa to implement conservation efforts targeting 41 snail species of the federally-listed genus *Achatinella* as well as five extremely rare species in the family *Amastridae*. The partners' strategy includes release of captive-bred snails into natural habitat protected by predator exclusion fencing in the Ko'olau Mountains of O'ahu. Other actions include population surveys, monitoring, and predator control.

Federal Funds Requested: \$249,952; **Non-Fed Match:** \$87,483

7) Illinois Department of Natural Resources, Office of Resource Conservation

Title: Recovery of the Alligator Snapping Turtle in the Mississippi River Valley Drainages of Southern Illinois, Oklahoma and Louisiana

State(s): Illinois, Oklahoma, Louisiana

Goals and Objectives: This project seeks to reverse the decline of the Alligator Snapping Turtle (*Macrochelys temminckii*), which is state-identified as endangered or threatened in several Midwestern states. The U.S. Fish and Wildlife Service is currently reviewing the species for listing under the Endangered Species Act. The partnering states will generate life table data necessary for accurately assessing the species' conservation status, develop standardized reintroduction and monitoring protocols, and attempt to re-establish the turtle population in Illinois, where it was last documented in 1984. Reintroduced turtles in all three states will be monitored through radio telemetry.

Federal Funds Requested: \$499,888; **Non-Fed Match:** \$425,365

8) Iowa Department of Natural Resources

Title: Adaptive Management in Working Landscapes to Provide Habitat for Species of Greatest Conservation Need

State(s): Iowa, Missouri, Illinois

Goals and Objectives: Three states will partner to conserve and improve habitat for the Greater Prairie-chicken as well as a range of other bird and butterfly SGCN. The partners will establish nesting and brood-rearing habitat on privately-owned pasture land, reduce threats to these species by controlling tall fescue and other alien invasive species on State-owned lands, and acquire additional priority grasslands from willing sellers. This project focuses on lands identified in the partnering States' Wildlife Action Plans, including Bird Conservation Areas and Conservation Opportunity Areas, as well as State Wildlife Management Areas. These strategies are consistent with the developing strategic plans of the Eastern Tallgrass Prairie and Big Rivers Landscape Conservation Cooperatives.

Federal Funds requested: \$498,891; **Non-Federal match:** \$364,431

9) Maine Department of Inland Fisheries and Wildlife, Bureau of Resource Management

Title: The Gulf of Maine Coastal Marine Ecosystem Survey: Mapping Biological Hotspots

State(s): Maine, New Hampshire, Massachusetts

Goals and Objectives: The goal of this project is to fill critical knowledge gaps on the basic ecology, distribution and abundance of 27 species of greatest conservation need that inhabit the region's coastal marine ecosystem. Using distribution and abundance data, the partners will calculate biological hotspot index values and develop digital maps based on habitat use model predictions. This critical information will help the partners develop effective conservation programs for these species within the Gulf of Maine, and provide technical assistance for siting of offshore energy development projects to minimize effects on marine habitats.

Federal Funds Requested: \$497,804; **Non-Fed Match:** \$219,711

10) Maine Department of Inland Fisheries and Wildlife, Bureau of Resource Management

Title: Integrating Vulnerability Science into a Strategic Conservation Plan for Maine's Species of Greatest Conservation Need

State(s): Maine

Goals and Objectives: The Department of Inland Fisheries and Wildlife will build upon the ongoing work of the North Atlantic Landscape Conservation Cooperative and other regional conservation partnerships to inform a comprehensive review and update of the Maine Wildlife Action Plan. The outcome will be a new Plan that utilizes the best-available climate science to comprehensively address threats to the state's species and habitats. The revised Plan will provide better guidance at the scale of specific

management regions, outline a process for achieving measurable goals, and provide usable data to non-governmental conservation partners.

Federal Funds Requested: \$39,449; **Non-Fed Match:** \$13,151

11) Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife

Title: Conserving Snake Species of Greatest Conservation Need Threatened by an Emerging Fungal Skin Disease

State(s): Massachusetts, New Hampshire, Connecticut, Vermont, New Jersey, Tennessee, Minnesota, Wisconsin, Illinois

Goals and Objectives: A suspected new fungal skin disease has been identified as a newly emerging threat to snakes, including Species of Greatest Conservation Need such as Massasauga (*Sistrurus catenatus*) and Timber Rattlesnake (*Crotalus horridus*) in multiple eastern and Midwestern states. Using data obtained from this regional snake species assessment, the many state partners will utilize an adaptive management framework for development of long-term conservation strategies for up to 40 snake species potentially impacted by the disease. Other conservation actions include evaluation of treatment options, experimental treatment with antifungal agents, captive rearing, and monitoring.

Federal Funds Requested: \$500,000; **Non-Federal Match:** \$247,423

12) Minnesota Department of Natural Resources, Division of Ecological and Water Resources

Title: Upper Midwest Riverine Turtle Habitat Improvement

State(s): Minnesota, Iowa, Michigan, Wisconsin

Goals and Objectives: This collaborative, landscape-scale conservation project led by Minnesota Department of Natural Resources implements management strategies recommended by the Midwest Partners in Amphibian and Reptile Conservation. Conservation actions will primarily benefit the imperiled wood turtle (*Glyptemys insculpta*) and the rare smooth softshell turtle (*Apalone mutica*), with ancillary benefits to the Blandings turtle and other turtle species of greatest conservation need. Actions include nest site management, reduction of adult turtle mortality through establishment of road and bridge crossings, habitat restoration, and monitoring.

Federal Funds requested: \$493,903; **Non-Federal match:** \$416,994

13) North Carolina Wildlife Resources Commission, Department of Environment and Natural Resources, Division of Inland Fisheries

Title: Robust Redhorse Recovery and Habitat Restoration

State(s): North Carolina, South Carolina

Goals and Objectives: The robust redhorse (*Moxostoma robustum*), a large fish found in only three river drainages in the southeastern U.S., is a state-listed endangered species in North Carolina. Little is known of the effects of common contaminants on water quality and the species' food web dynamics, uncertainties which must be resolved before the fish can be effectively restored. The collaborative effort will rely on expertise from the U.S. Geological Survey, North Carolina State University and the state resource agencies of North and South Carolina. Field sampling and laboratory analyses will allow the partners to develop population and food web models to describe and project the effects of habitat and water quality changes on populations of the species. The results will inform decision-making and management for the robust redhorse along with up to 52 additional fishes, mussels, and crayfish.

Federal Funds Requested: \$460,000; **Non-Fed Match:** \$225,400

14) North Carolina Wildlife Resources Commission, Department of Environment and Natural Resources, Division of Inland Fisheries

Title: Identifying Conservation Opportunity Areas for the 2015 Revision of the North Carolina Wildlife Action Plan

State(s): North Carolina

Goals and Objectives: The North Carolina Wildlife Resources Commission will work with the U.S. Geological Survey and North Carolina State University to implement strategies recommended by the Association of Fish and Wildlife Agencies for revision of the North Carolina State Wildlife Action Plan. A key advance will be made by utilizing spatial models to analyze and map Conservation Opportunity Areas based on habitat threats such as urban growth, pollution, and impacts from climate change. Partners will consolidate and maintain these data sets, making them available to the public through an internet data portal.

Federal Funds Requested: \$94,374; **Non-Fed Match:** \$31,458

15) Pennsylvania Game Commission, Bureau of Wildlife Management, Division of Wildlife Diversity

Title: Pennsylvania Wildlife Action Plan 2.0 – Prioritization and Mapping Enhancements

State(s): Pennsylvania

Goals and Objectives: Over the next two years, the Pennsylvania Game Commission and the Fish and Boat Commission will voluntarily implement best practices for State Wildlife Action Plan revision, as recommended by the Association of Fish and Wildlife Agencies. Among other objectives, the project will include the development of a tiered classification system for the state's species of greatest conservation need, which incorporates climate change vulnerability indices. Another key outcome is the development of a habitat prioritization matrix which will help the Commission delineate priority areas for conservation action such as land acquisition, habitat management and restoration. Pennsylvania seeks to more fully integrate a geospatial component into their revised State Wildlife Action Plan.

Federal Funds Requested: \$96,900; **Non-Fed Match:** \$60,488

16) Wisconsin Department of Natural Resources, Division of Land and Law Enforcement

Title: Driftless Area Initiatives to Benefit Species of Greatest Conservation Need

State(s): Wisconsin, Minnesota

Goals and Objectives: The partnering states will focus a variety of conservation actions on critical geographical areas identified in their Wildlife Action Plans, to benefit species such as the northern cricket frog, the Cerulean Warbler, and the Eastern Meadowlark. Regional and national conservation organizations such as Trout Unlimited and the Upper Mississippi River and Great Lakes Region Joint Venture have also identified the mixed open woodlands, grasslands, and waterways of the Driftless Area as key lands for conservation. The project will result in 800 acres of improved oak savanna, woodlands, and prairies benefiting more than 30 species of greatest conservation need.

Federal Funds Requested: \$500,000; **Non-Fed Match:** \$493,038